

Agenda Item Report

Mayor & Commissioners (Workshop)

December 9, 2024



SECTION: Old Business

ITEM: Discuss joint request by the Lewes Board of Public Works and Sussex County exploring a three-way regional wastewater partnership among the two organizations including report on analysis of request by the City administrative team.

SUBMITTED BY: Henry Matlosz, Director of Public Works, Public Works

PURPOSE

To have further discussion with the Commissioners and public regarding proposed partnership agreement. Recommendation from city administrative staff will be provided. The term administrative staff refers to the following throughout the agenda item, including recommendations.

- Taylour Tedder City Manager
- Evan Miller Assistant City Manager
- Henry Matlosz Public Works Director (current)
- Kevin Williams Public Works Director (former)
- Burt Dukes Finance Director

BACKGROUND

City of Rehoboth Beach (RB) and Sussex County (SC) have been in partnerships with wastewater agreements since 1983 with the current agreement being signed in 2017. These have and continue to go smoothly. These partnerships include loans to RB provided by SC (0 or 2% interest) with SC financing additional plant upgrades. SC currently pays 42% of the debt service of a \$12,000,000 plant upgrade loan, plus 42% of the outfall loan which was originally over \$40,000,000. RB currently treats flow from Dewey Beach, areas of West Rehoboth and Henlopen Acres and bills SC the appropriate operational and maintenance (O&M) costs quarterly.

There have been four public meetings held since June 10, 2024, with December 9, 2024 being the fifth regarding the proposed agreement. The Communications Manager has elevated publicity of those meetings on social media and Lines in the Sand to ensure residents and businesses were able to provide input through public comment. RB hired an independent consultant (Hazen and Sawyer) to perform a risk assessment, hydraulic analysis, and verify the suitability of the financial proposal provided by SC and Lewes BPW (LBPW). SC has requested a decision by the end of calendar year 2024, because if RB decides not to move forward, other options must be explored expeditiously.

Much of the discussion regarding the proposed wastewater agreement with SC and LBPW has been centered around risk if RB enters into the agreement. The other side should be at least

considered— what could happen if RB doesn't enter into the agreement.

In FY2024 RB received about \$1,600,000 for treating Dewey Beach flow, and \$300,000 for treating Henlopen Acres in agreements with SC. To be clear, RB does not maintain the sewer manholes and piping in either Dewey Beach or Henlopen Acres. North Shores is under a separate agreement; there are 2 pumping station in North Shores that RB maintains, plus all manholes and associated gravity and force mains.

SC can currently divert flow to their Wolfe Neck plant from Dewey Beach by changing the valve configuration if they choose. With capacity limitations of their current treatment plant, it's not in their best interest to do so. With a new treatment plant and existing piping, SC could realistically divert about 400,000 gallons per day from Dewey Beach to a new Wolfe Neck plant. If they were to install larger piping (at a considerable capital expense) they could divert all of it. Regarding Henlopen Acres, it would be a capital expense of under \$1,000,000 to divert all flow from RB. This diversion of flow would have negative financial consequences for RB. RB has just under 2400 wastewater customers within city limits. The worst case scenario would be if SC were to divert all Dewey Beach and Henlopen Acres flow to Wolfe Neck, the \$1.9M revenue loss would be spread among the 2400 customers, resulting in an almost \$800 annual increase in sewer fees. If SC and LBPW were to build a new facility without sharing the RB outfall, this possibility needs to be at least considered by the Commissioners and the public. It is not being implied or suggested in any way that SC would take this approach. SC has about 86,000 wastewater customers, which gives them the ability to spread costs much easier using economy of scale compared to a small system like RB. SC residential rate for wastewater treatment is \$340 per year.

If the agreement occurs, it's very much to RB's advantage to receive a lump sum of \$20,000,000 (rather than periodic payments). The lump sum payment was proposed. \$20,000,000 represents a future potential maximum flow. It should be noted that SC could have requested staggered payments based on actual flow, but did not. Below is the net present value based on a 3% discount rate with a \$10,000,000 payment initially, then a \$5,000,000 payment in years 7 and 14. Obviously, these are assumptions of time to reach specific flows plus assuming a 3% discount rate.

Net Present Value \$17,079,785

Payment Year 1 \$10,000,000

Payment Year 7 \$5,000,000

Payment Year 14 \$5,000,000

Following are some suggestions and considerations before potentially moving forward with an agreement:

- Surge analysis to be performed and paid for by SC during appropriate timing of Wolfe Neck design. Additional air release valves (ARVs) to be paid for by SC if required for RB force main.
- Bi-directional flow available. If outfall repair is needed, this would allow time for repair since RB effluent could be stored in Wolfe Neck effluent lagoons. Design and implementation are to be paid for by SC.
- Per Hazen's recommendation, vault(s) be installed near the connection point to allow for future pump tests, diversion connection, water quality testing of both effluent

lines, and means for effluent line inspection in the future. This is to be paid by SC.

- SC agrees not to divert flow from the RB treatment plant for Dewey Beach or Henlopen Acres without RB approval.
- When timing is appropriate and required, SC would pay for upgrading the RB effluent pumping station. Method to be mutually agreed upon between SC and RB at the appropriate time.
- Real-time communication between both systems and data sharing. This would allow SC to stop flow and allow RB to have “full pipe availability” for instantaneous peaks during storm events. This would be possible due to Wolfe Neck effluent lagoons.
- Should any modifications or additions be required to the outfall, SC is to pay for modifications. Both parties need to agree on any such changes.

OPTIONS (COURSE OF ACTION)

Commissioners consider all data, presentations and public opinion that have been put before them since the June 10, 2024 meeting and either approve or disapprove the request to move forward with the request from SC for joint partnership, to vote at the December 20, 2024 regular meeting.

STAFF RECOMMENDATION

Should above considerations be agreed to by all parties, RB Staff believes all concerns raised in the past six months have been adequately addressed, and all parties are acting in good faith. These concerns include engineering considerations, treatment, permits, plus concerns of needing more outfall capacity concerning future growth of RB.

RB staff also believes the \$20,000,000 lump sum payment to be fair. Based on the financial analysis, a 11.45 million gallons per day (MGD) maximum capacity (10 state standards) of the outfall was used by SC. They could have calculated a 12.2 MGD using a weighted average piping size inside of minimum diameter, which would have lowered the proposed dollar amount. Also, staggered payments based on actual flow could have been presented, which would have reduced the net present value of the \$20,000,000.

Not every detail can be addressed now. It is staff’s belief that there is and will continue to be a harmonious working relationship between SC and RB, and any future details and concerns can be “ironed out.”

FINANCIAL IMPLICATIONS

There are financial benefits to this proposal including a \$20M one-time payment upon permit approvals, Sussex County assuming all future outfall operations and maintenance costs, and Sussex County and Lewes BPW providing force main maintenance and repair costs (from the tie-in point) based on the percentage of utilization. The one-time payment, once received, could be restricted for future wastewater-related capital improvements, resulting in future savings to the Rehoboth Beach ratepayers. Sussex County currently pays 42% of the debt service of a \$12,000,000 plant upgrade loan plus 42% of the outfall loan, which was originally over \$40,000,000. Additionally, in FY2024 Rehoboth Beach received about \$1,900,000 from Sussex County for treating Dewey Beach and Henlopen Acres flows. If, in the future, the County decides to divert flow from Rehoboth Beach to Wolf Neck, this diversion would have negative financial consequences for Rehoboth Beach ratepayers.

BUDGET REVIEW

N/A

LEGAL REVIEW

N/A

PROPOSED MOTION

N/A

CDP AFFILIATION

ATTACHMENTS/SUPPORT DOCUMENTS

[LBPW-SussexTermSheet](#)

[StaffRecommendation](#)

LBPW-SC Term Sheet

Lewes BPW (LBPW) and Sussex County (SC) herein present a proposal under which Rehoboth Beach (RB) will participate in a regional solution to remove all treated effluent discharges from the Lewes-Rehoboth Canal. The proposal builds on the current partnership between SC and RB and LBPW.

Terms:

1. LBPW and SC will enter an access agreement with RB for up to 5.0 million gallons per day of treated wastewater to the RB ocean outfall.
2. The access agreement to be a one-time payment of \$20M upon permit approvals.¹
3. The access agreement to mirror current RB-SC agreement with 25-year renewals in perpetuity if no party is in default.
4. SC to continue its current agreement for use of the RB treatment plant and continue to pay 42% of the RB outfall debt service.
5. LBPW and SC to build a new treatment facility at the Wolfe Neck property and an effluent transmission line to connect to the RB force main and outfall.
6. The new Wolfe Neck treatment facility to meet or exceed Rehoboth's current treatment plant performance.
7. Treatment design to be an extended aeration process with a BNR component identical to the South Coastal RWF and the RB processes. Design to structurally accommodate future treatment requirements, e.g., the inclusion of activated carbon filtration.
8. Transmission design to include valving for bi-directional flow capabilities as well as sampling and testing ports.
9. LBPW and SC to assume all ocean testing and modelling and any outfall modification costs.

10. SC to assume all future outfall operations and maintenance costs.
11. LBPW and SC to provide force main maintenance and repair costs (from the tie-in point) based on the percentage utilization.
12. Each party to maintain the collection and transmission systems under its jurisdiction.²
13. Each party shall be responsible to maintain permit compliance at the compliance point as well as flow measurement at the respective facility.

Written Agreement to be drafted upon positive action taken by the City of Rehoboth Beach Board of Commissioners.

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¹ List of required permits include:

1. *Easements for State owned parcels*
2. *Wolfe Neck Authorization to Discharge NPDES Permit*
3. *Wolfe Neck Wastewater Construction Permit (Treatment & Effluent Forcemain)*
4. *DelDOT Utility Construction Permit*
5. *DNREC Subaqueous Lands Utility Crossing Permit*
6. *Corps of Engineers Canal Crossing Permit*
7. *US Coast Guard Navigable Waters "concurrence"*
8. *SCD Detailed Stormwater Management Permit*

² The existing RB infrastructure will not require any improvements due to the negligible hydraulic impact documented by the Hazen report.

Rehoboth Beach Outfall Staff Analysis



Rehoboth Beach Outfall Staff Analysis

Dates of Commissioner Public Workshop Meetings with Proposal Discussions/Presentations

- June 10,2024
- July 8, 2024
- September 9, 2024
- November 4, 2024
- December 9, 2024

All questions brought up by Commissioners and public have been discussed and addressed.



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Rehoboth Beach Outfall Staff Analysis

History with Sussex County Wastewater agreements

- 1983 – First agreement
- 2017 – Current wastewater agreement signed. County allocation 42% - can be increased to 50% which equals their portion of debt service. This is for the outfall and plant loans. County pays operational and maintenance (O&M) expenses based on percentage of flow. Current annual O&M received from County is just under \$2,000,000.
- 2018- Outfall operational
- 2018 - 2020 – County funds additional loans for plant upgrades totaling \$5.3 million. Interest rate ranges between 0 and 2%.



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Rehoboth Beach Outfall Staff Analysis

Financial considerations

- County offer is \$20,000,000 lump sum payment upon approval of all permits.
- Net Present Value of staggered payments is less than \$20,000,000 lump sum.
- Hazen and Sawyer was provided County presentation and verified reasonableness of payment.
- At least consider possibility of County pulling flow. City could lose up to \$2,000,000 O&M revenue per year.



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Rehoboth Beach Outfall Staff Analysis

Other Points of Discussion

- Surge analysis at appropriate time to be completed during design phase, paid by Sussex County. Any required force main modifications (air release valves) to be paid for by County.
- County to pay for all outfall operations and maintenance costs. This includes any modifications required for increased flow. County to pay for all testing, sampling and ocean modelling.
- If required (based on design and flow), County to pay for required modifications to Rehoboth Beach effluent pump station.



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Rehoboth Beach Outfall Staff Analysis

Other Points of Discussion

- Real time communication between both systems. County to coordinate with Rehoboth to stop County flow for instantaneous peaks during storm events.
- County agrees not to divert flow from Rehoboth treatment plant without Rehoboth Beach approval.
- Bi-directional flow available with vault(s) to be installed near connection point for testing, sampling, inspection.



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Rehoboth Beach Outfall Staff Analysis

Staff Recommendation

- City of Rehoboth Beach staff believes all concerns have been adequately addressed, and if all parties agree to considerations on previous pages, including Sussex County agree not to pull Dewey Beach or Henlopen Acres flow from Rehoboth Beach plant without Rehoboth Beach approval (except in case of emergency), staff recommendation is to move forward with the agreement with Sussex County for a \$20,000,000 lump sum payment to send up to 5 million gallons per day of treated effluent.



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Rehoboth Beach Outfall Staff Analysis

Questions?



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